

Department of Aeronautics and Astronautics Naval Postgraduate School

Faculty Vita

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Education:

Ph.D. Mechanical Engineering, The University of Iowa (1983)
MEME, The Indian Institute of Science, India (1976)
BEME, Bangalore University, India (1974)

Related Experience (Teaching, Industrial, etc.):

Lecturer, Cogswell Polytechnic College, Sunnyvale, California, 1993-1996
Visiting Assistant Professor, Florida State University, 1986-1987
Applications Engineer, TSI, Inc., 1984-1986
Post-Doctoral Fellow, Stanford University, Joint Institute of Aeronautics and Acoustics, 1983-1984
Post-Doctoral Fellow, University of Iowa, 1983
Graduate Research Assistant, University of Iowa, Institute of Hydraulic Research, 1979-1983
Scientist, Aerodynamic Division, National Aeronautical Laboratory, Bangalore, India, 1977-1979

Institutional and Professional Service (Last 5 Years):

Member, AIAA Fluid Dynamics Technical Committee, 1993-1996, 1997-2000
NASA COTAR for the SBIR subcontract, NASA ARC Fluid Mechanics Laboratory, 1996-1998
Mentored students at De Anza College and in the SHARP program, NASA Internship program, 1989-1996

Honors and Awards:

NASA Ames Fluid Dynamics Division Best Paper Award, 1994
Recipient of NASA Technical Brief Award, 1992
Recipient of NASA Group Achievement Award, 1989
Recipient of the Best Student Award, Bangalore University, India, 1974

Scientific and Professional Society Membership:

American Institute of Aeronautics and Astronautics (AIAA), Associate Fellow
American Society of Mechanical Engineers (ASME)

Principal Publications (Last 5 Years):

Ekaterinaris, J.A. and Chandrasekhara, M.S., "Numerical Investigation of Passive and Active Control of Unsteady Compressible Flow," Preprint AIAA-00-4417, 18th AIAA Applied Aerodynamics Conference, Denver, Colorado, August 14-17, 2000.

- Sahin, M., Sankar, L.N., Chandrasekhara, M.S. and Tung, C., "Dynamic Stall Alleviation Using a Deformable Leading Edge Concept – A Numerical Study," Preprint AIAA-00-0520, 38th AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, January 10-13, 2000.
- Chandrasekhara, M.S., "Review of Compressible Dynamic Stall and Its Control," *Proceedings of the 8th Asian Congress of Fluid Mechanics*, International Academic Publishers, Shenzhen, China, pp. 47-50.
- Chandrasekhara, M.S., Wilder, M.C., and Carr, L.W., "Compressible Dynamic Stall Control: Comparison of Two Approaches," Preprint AIAA-99-3122, 17th AIAA Applied Aerodynamics Conference, Norfolk, Virginia, June 28 – July 1, 1999. (accepted for the *Journal of Aircraft*).
- Chandrasekhara, M.S., Wilder, M.C. and Carr, L.W., "The Control of Compressible Dynamic Stall Using Adaptive Airfoils," *IUTAM Symposium on Mechanics of Passive and Active Flow Control*, Kluwer Academic Publishers, FMIA, vol. 53, August 1999, pp. 75-80.
- Carr, L.W., Chandrasekhara, M.S., Wilder, M.C. and Noonan, K.W., "Effect of Compressibility on Suppression of Dynamic Stall Using a Slotted Airfoil," Preprint AIAA-98-0332, 36th AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, January 12-15, 1998, *Journal of Aircraft*, vol. 38, no. 2, pp. 296-309, March-April, 2001.
- Chandrasekhara, M.S., Wilder, M.C. and L.W.Carr, "Unsteady Stall Control Using Dynamically Deforming Airfoils," *AIAA Journal*, vol. 36, no. 10, October 1998, pp. 1792-1800.
- Chandrasekhara, M.S., Wilder, M.C. and Carr, L.W., "On the Competing Mechanisms of Compressible Dynamic Stall," Preprint AIAA-96-1953, 27th AIAA Fluid Dynamics Conference, New Orleans, Louisiana, June 17-20, 1996, also, *AIAA Journal*, vol. 36, no. 3, March 1998, pp. 387-393.
- Chandrasekhara, M.S., Carr, L.W. and M.C.Wilder, "Development of High Speed Imaging and Analysis Techniques for Compressible Dynamic Stall," *AGARD CP-522*, May 1998, pp. 21.1-21.12.
- Chandrasekhara, M.S., Carr, L.W., Wilder, M.C., Hiel, C., Sticht, C.D. and Paulson, G.N., "Design and Development of a Dynamically Deforming Leading Edge Airfoil for Unsteady Flow Control," *ICIASF'97 RECORD*, IEEE Publication No. 97CH36121, pp. 132-140.
- Van Dyken, R.D., Ekaterinaris, J.A., Chandrasekhara, M.S. and Platzer, M.F., "Analysis of Compressible Light Dynamic Stall Flow at Transitional Reynolds Numbers," *AIAA Journal*, vol. 34, no. 7, July 1996, pp. 1420-1427.
- Chandrasekhara, M.S., Wilder, M.C. and Carr, L.W., "Boundary Layer Tripping Studies of Compressible M.S Dynamic Stall Flow," *AIAA Journal*, vol. 34, no. 1, January 1996, pp. 96-103.
- Chandrasekhara, M.S., Van Dyken, R.D., Ekaterinaris, J.A. and Platzer, M.F., "Analysis of Compressible Light Dynamic Stall Flow at Transitional Reynolds, Numbers," *AIAA Journal*, vol. 34, no. 7, July 1996, pp. 1420-1427.
- Carr, L.W. and Chandrasekhara, M.S., "Compressibility Effects on Dynamic Stall," *Progress in Aerospace Sciences*, vol. 32, pp. 523-573, December 1996.